REMARKS

The FINAL Rejection of July 25, 2006 has been carefully studied. It is respectfully submitted, however, that Applicants may not have stressed the significant difference between the present invention and that of the prior art. In Applicants' process, an adsorption step, for example conducted in a simulated moving bed, is conducted in order to separate a feedstock containing xylenes, ethylbenzene and C9-C10 hydrocarbons. The extract from such an adsorption step is withdrawn and distilled in order to obtain substantially pure paraxylene, a highly commercial product used in the production of polymers which find uses, for example in textiles and films. A raffinate product is also produced from the adsorption column which is distilled to obtain desorbent as bottoms and a distilled raffinate as overhead. As seen from Figure 1 this distilled raffinate product contains metaxylene, orthoxylene and ethylbenzene, and according to the tables on pages 21 and 23, the distilled raffinate (9 (b)) predominates in the xylenes and contains a minor amount of ethylbenzene (7.06% in the table on page 21 and 7.42% in the table on page 23). And it is this distilled raffinate containing mostly xylenes which is subjected to dehydrogenation in order to convert ethylbenzene to styrene. In contrast, in the Magne-Drisch et al. patent 6,369,287, an "ethylbenzene-rich" raffinate is produced in the first adsorption column and this raffinate is distilled in column (5) to eliminate toluene, and then the resultant toluene-depleted stream is separated in adsorption column (8) to recover a purified ethylbenzene (9). It is this purified ethylbenzene which may be dehydrogenated into styrene by a process such as that of the secondary reference Lee 3,306,942. In Applicants' process, however, the dehydrogenation step is conducted upstream of the step of separating mixture 18 in the second separation column, and the stream that is dehydrogenated is a mixture of xylenes and ethylbenzenes not essentially pure ethylene.

It is appreciated that Applicants' claims do not specify that the distilled raffinate which is subjected to hydrogenation contains only a minor content of ethylbenzene compared to metaxylene and orthoxylene, but if essential to provide such a limitation, Applicants would be amenable to same. (It was considered heretofore, that by describing the distilled raffinate product as containing metaxylene, orthoxylene and ethylbenzene and then dehydrogenating the

stream that this would be sufficient to patentably distinguish Applicants' process from Magne-Drisch et al. which provides a stream (9) consisting of 99% pure ethylbenzene.)

Also bearing in mind that the present inventors have a common inventor with that of the Magne-Drisch et al. patent, both the present application and the patent being owned by the prestigious petroleum research organization, Institut Francais du Petrole, the advantages of the present invention set forth on pages 11 and 12, should be given probative weight even though the record does not contain any quantitative comparisons with the older Magne-Drisch et al. process. In other words, the common inventor would not have considered the advantages on pages 11 and 12 to be of any import if the same advantages accrued to the process of Magne-Drisch et al.

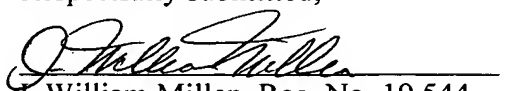
With respect to the claims dependent on claim 1, Applicants, for the record, do not acquiesce to the statements regarding the dependent claims that are set forth in the Office Action and reserve the right to present rebuttals at a later date if ever necessary. For example, referring to the last paragraph on page 6 of the FINAL Rejection, if the bottoms contain a small quantity of styrene and unconverted ethylbenzene, would it not appear to be more conventional to use a separatory operation, for example, vacuum distillation, extractive distillation, fractional crystallization etc., rather than conducting a chemical reaction which would convert the desired styrene into a starting material rather than a final product?

In view of the above remarks, favorable reconsideration is courteously requested. If the Examiner deems it necessary to insert "a minor quantity of" before ethylbenzene in describing the distilled raffinate in the claims, he is hereby authorized to do so. Otherwise, Applicants rely on the clear statements in all the claims and incorporate the comments in the last response herein.

If there are any residual problems which are not addressed by this response, the Examiner is invited to telephone Counsel at the number indicated below, but if Counsel is not available, the Examiner is invited to telephone Mr. Richardson at 703-812-5326 who will enlist another attorney to help the Examiner resolve the issue.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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